

## REMARKS

### Status of the Claims

Claims 1-30 are pending in this application.

Claims 1-30 are rejected.

Claim 29 is objected to.

Claims 24, 26, 28 and 29 have been amended. Support for these amendments can be found throughout the specification, claims, and drawings, as originally filed.

### Specification Amendments

The Office Action objected to the drawings for failing to comply with 37 CFR 1.84 (p)(5) because Fig. 5 included a reference numeral 9 that was not described in the specification. Applicant respectfully submits an amendment to the specification adding a reference numeral 9 which corresponds to the vehicle body as shown in Fig. 5. Support for this amendment can be found throughout the specification and drawings of this application.

### Drawing Objections

The Office Action objected to the drawings as failing to comply with 37 CFR 1.84 (p)(5) because reference 60 on page 5, line 4 was missing from the drawings. Applicant respectfully submits a corrected figure 1 which now has a reference 60 which was mistakenly omitted in the filing of the original application. Figure 1 previously had a reference 20 that designated two structures, however, as clearly identified in the

specification one of those structures should have been labeled 60. See the first full paragraph on page 5 on the specification.

The Office Action also objected to the drawings for failing to comply with 37 CFR 1.84 (p)(5) because Fig. 5 included a reference numeral 9 that was not described in the specification. Applicant has submitted an amendment to the specification which corrects this omission. The amendment to the specification discussed above adds a reference number 9 indication that the structure is a vehicle. Therefore, Applicant respectfully requests that the objection to the drawings be removed as they have now been obviated by amendment.

### **Claim Objections**

The Office Action objected to claim 29 under 37 CFR 1.75(c), as being of improper dependant form for failing to further limit the subject matter of a previous claim. More specifically, the Office Action stated that the limitations of claim 29 were identical to the limitations found in claim 20 from which claim 29 depends. Applicant has amended claim 29 to be dependant upon claim 21. This amendment obviates the Office Action's objections. Applicant now requests removal of the objection of claim 29.

### **Rejection of Claims 1-30 Under 35 U.S.C. § 103**

Claims 1-30 stand rejected under 35 U.S.C. § 103(a). More specifically claims 1-3, 6-12, 15-21, and 24-30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 3,712,703 to Newdigate (hereinafter the '703 patent) in view of U.S. Patent No. 4,136,925 issued to Menzies et al. (hereinafter the '925 patent). Claims

4, 5, 13, 14, 22 and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the '703 patent in view of the '925 patent and further in view of U.S. Patent No. 4,540,252 issued to Hayashi et al. (hereinafter the '252 patent). The Applicant respectfully traverses the 35 U.S.C. § 103(a) rejection of claims 1-3, 6-12, 15-21 and 24-30.

With regard to claims 1, 12, and 21 the Office Action stated:

Newdigate [the '703 patent] teaches a vehicle mirror assembly comprising: a mirror frame (reference 46); a rotor (references 22 and 24) rotatably mounted with respect to the mirror frame (column 2 lines 15-18); a member for rotating (references 28 and 70) the rotor with respect to the mirror frame (column 2 lines 26-34 and column 3 lines 4-11); a connection member (reference 12) operably interposed between the rotor and the mirror frame allowing pivoting of the rotor with respect to the mirror frame (column 2 lines 35-43); and a mirror (reference 26), having a reflective surface (column 2 lines 18-20), mounted with respect to the rotor so that the surface remains substantially parallel to the plane in which the rotor rotates (Figure 1 references 24 and 26 are parallel) and substantially normal to the rotational axis of the rotor (Figure 1 reference 26 is normal to the axis of reference 22). Newdigate [the '703 patent] does not teach that the rotor stabilizes the mirror against tilting vibrational movement.

The Office Action indicated that the '703 patent did not disclose each and every element of the rejected claims, and therefore, was combined with the '925 patent stating that this patent teaches:

a vehicle mirror assembly with a rotor (assembly shown in Figure 2) and a mirror (reference 39), wherein the rotor stabilizes the mirror against tilting vibrational movement (Abstract lines 3-6 and column 3 lines 3-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the rotor of Menzies et al. [the '925 patent] in place of the rotor in the vehicle mirror assembly of Newdigate [the '703 patent] in order to improve the clarity in the reflected image (Menzies et al. column 1 lines 28-56).

Applicant respectfully traverses the rejection of independent claims 1, 12 and 21 because the Office Action was not correct in relying upon the '925 patent to teach that

"the rotor stabilizes the mirror against tilting vibrational movements." One of the problems addressed by the '925 patent is that "...it has been found that there is a very great loss of clarity in the reflection from a mirror which is rotated on an end of a motor drive shaft engaged in conventional bearings." Col. 1, lines 28-31. In the specification, the '925 patent further describes the invention as having "a circular mirror mounted in the housing for rotation about its axis..." which also includes "...a stabilizer means bearing non-centrally on the mirror to cause its rotation to be substantially in a desired plane." Col. 1, lines 61-66. The rotor of the '925 patent does not provide any stability, but rather there is a stabilizing means that provides stability as the rotor rotates. A review of the detailed description of the '925 patent confirms this statement:

...[t]he stabilizer ring 56 is maintained in firm contact with the mirror by a helical compression spring 58 about the sleeve 53, one end abutting against the peripheral flange 57, the spring, near to its other end, being held by a washer 59 on the screw 54. The pressure exerted by the spring on the stabilizer ring may be adjusted by slackening the screw 54, rotating the spring in one direction or the other, and re-tightening the screws so that, although the spring is held against rotation and against undue vibration, the sleeve 53 remains slidable on the cylindrical member 37. To dampen further any undue vibration of the spring, two similar damping pieces 60, shown particularly in FIG. 3, are engaged and secured adhesively between successive convolutions of the spring near its end further from the mirror, on opposite sides of the sleeve. Col. 3, lines 42-57.

Lastly, the specification clarifies the function of the stabilizer mechanism stating that "[i]t will be found that after a very brief initial unsteadiness, the mirror will rotate without significant vibration, due to the spring-loaded stabilizer ring 56 bearing against the mirror, and the flexibility of the coupling 40." Col. 4, lines 16-21. [emphasis added]. The Office Action is incorrect in relying upon the '925 patent to teach or suggest that the rotor stabilizes the mirror against tilting vibrational movement, when in fact it is a

stabilizer ring in combination with other structures which eliminate the vibration of the mirror. Therefore the premise that the '925 patent cannot be combined with the '703 patent to arrive at the invention set forth in claims 1, 12 and 21 is not correct.

Assuming the combination of the '925 and '703 patents, Applicant maintains that the '703 patent does not teach or suggest using a rotor to stabilize the mirror against tilting vibrational movements. The Newdigate patent teaches a vehicle mirror assembly designed for the purpose of removing droplets of moisture that accumulate during rainy or misty conditions. Col. 1, Lines 6-13. The invention comprises a dome-shaped housing having an open shoulder front end, having a support plate that is fitted; the support plate centrally carries a ball bearing. Col. 2, Lines 11-14. A rotatable shaft is mounted on the inside of the bearing; at its front end is a mirror mounting plate having a circular reflecting mirror attached to it, so that its reflecting surface faces outwardly. Col 2, Lines 15-20. As the mirror rotates, accumulated droplets of moisture or other foreign particles can be removed. Col. 1, Lines 6-13, and 15-17. Since the '703 patent does not teach or suggest stabilizing the mirror against tilting vibrational movements as set forth in claims 1, 12 and 21, Applicant respectfully requests removal of the rejection of these independent claims as well as all of the claims dependent thereof and Applicant respectfully requests the Examiner to allow this case to move to issue.

The Office Action also rejected claims 2-3 and 6-11 which are dependant upon claim 1; claims 15-20 which are dependant upon claim 12; and claims 24-30 which are dependant upon claim 21. As discussed above with respect to claims 1, 12 and 21 the '703 patent and the '925 patent when combined do not render each and every element of claims 1, 12 and 21 obvious since these two references when combined fail to teach or suggest using a rotor to stabilize the mirror against tilting vibrational movement. All

of the rejections made were based upon the premise that the '703 patent is combinable with the '925 patent to teach or suggest using a rotor to stabilize the mirror against tilting vibrational movement. As stated above the '925 patent and the '703 patent do not use a rotor to stabilize the mirror. Therefore the rejection of dependant claims 2-3, 6-11, 15-20 and 24-30 which build upon their respective underlying independent claims will be overcome since the '703 patent and the '925 patent do not render the underlying independent claims obvious.

Claims 4, 5, 13, 14, 22, and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Newdigate in view of Menzies et al. and further in view of Hayashi et al., U.S. Patent No. 4,540,252 (hereinafter the '252 patent).

With respect to claims 4, 13 and 22, the Office Action stated:

... Newdigate in view of Menzies et al. teaches a vehicle mirror assembly as described above. Newdigate further teaches the connection member comprises a pivot mounting (references 12, 46, 50, and 52) interposed between the mirror frame and the support portion. Newdigate does not teach the connection member comprises at least two legs operably interposed between the mirror frame and the support portion, each leg comprising an actuator for adjusting the no-load length of the leg and a vibration absorber connected in series to the actuator, wherein the actuator enables adjustment of the timed-averaged orientation of the mirror with respect to the mirror frame and the vibration absorbers reduce the transmission of vibration forces from the mirror frame to the support portion.

Hayashi et al. teaches a vehicle mirror assembly with a connection member (Figure 2) that comprises a pivot mounting (reference 103a) interposed between the mirror frame (reference 1) and the support portion (reference 110); and at least two legs (references 116 and 117) operably interposed between the mirror frame and the support portion, each leg comprising an actuator (references 106 and 107) for adjusting the no-load length of the leg and a vibration absorber (references 120 and 121) connected in series to the actuator, wherein the actuator enables adjustment of the timed-averaged orientation of the mirror with respect to the mirror frame (column 4 lines 27-42) and the vibration absorbers reduce the transmission of vibration forces from the mirror frame to the support portion (column 3 lines 5-8). It would have been obvious to one of

ordinary skill in the art at the time of the invention to use the connection member with a pivot mounting and at least two legs of Hayashi et al. in place of the connection member with a pivot mounting in the vehicle mirror assembly of Newdigate in view of Menzies et al. in order to automate the adjustment of the mirror angle. [emphasis added]

Applicant respectfully traverses the rejection of claims 4, 5, 13, 14, 22, and 23 since, as established above, the '703 patent and '925 patent when combined do not render claims 1, 12 and 21 obvious since they fail to teach or suggest a rotor that stabilizes the mirror against tilting vibrational movement. Even assuming that the claimed combination can be properly made, claims 4, 5, 13, 14 and 22 are dependent upon claims 1, 12 and 21, therefore, the rejection of these claims will fail since the '703 patent and '903 patent fail to render the underlying independent claims obvious.

The rejections of claims 4, 5, 13, 14, 22, and 23 also included the newly introduced '252 patent. The '252 patent must was examined to determine if it can be properly combined with or adds teachings to the other references which teaches or suggests a rotor that stabilizes the mirror against tilting vibrational movement. The '252 patent is directed to a side view mirror capable of inclining the mirror surface to allow the driver to confirm the safety in a rear field of vision. The mirror is then automatically tilted back to its initial position Col. 1, Lines 39-57. The '252 patent does not teach or suggest using a rotor to stabilize the mirror against tilting vibrational movement does not add teachings which would overcome the inadequacies of the '703 and '903 patents as set forth previously. Therefore, it is respectfully submitted since all three references either alone or in combination fail to render claims 1, 12 and 21 obvious, claims 4, 5, 13, 14, 22, and 23 which are dependent upon these independent claims, and therefore include all of the limitations of the allowable base claims are likewise allowable.

Therefore, Applicant respectfully requests removal of the rejection and allowance of claims 4, 5, 13, 14, 22, and 23.

**CONCLUSION**

It is respectfully submitted that the cited patents whether taken alone or in combination, do not teach, suggest or render obvious the present invention set forth in claims 1-30, as amended. In view of the above amendments and remarks, claims 1-30, as amended, are patentably distinguishable over the cited patents. Therefore, Applicant submits that pending claims 1-30 are properly allowable, which allowance is respectfully requested.

The Examiner is invited to telephone the Applicant's undersigned attorney at (248) 364-4300 if any unresolved matters remain.

Respectfully submitted,

WARN, HOFFMANN, MILLER & LALONE, P.C.  
Attorneys for Applicant(s)

By: 

Gregory L. Ozga  
Reg. No. 53,425  
Philip R. Warn  
Reg. No. 32775

P.O. Box 70098  
Rochester Hills, MI 48307  
(248) 364-4300

Dated: July 12, 2004  
PRW:GLO:cah

Please note that the name of our firm has changed to "Warn, Hoffmann, Miller & LaLone, P.C.," although our address, telephone number and facsimile numbers remain the same. Please update your records accordingly.